	Christine washing per 109
	CF Errors Corrected by the STIC Systems Branch CRF Processing Dates 5/21/200
	CRF Processing Date: 3/4/2000 Edited by: "Verlifted
	· · ERED
(Changed the margins in cases where the sequence text was wrapped sown to the next line.
=	Edited a format error in the Current Application Data section, specifically:
	edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other
Α	dded the mandatory heading and subheadings for "Current Application Data".
Ε	dited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
С	hanged the spelling of a mandatory field (the headings or subheadings), specifically:
C	orrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
In	serted or corrected a nucleic number at the end of a nucleic line. SEO ID NO's edited:
	procted subheading placement. All responses must be on the same line as each subheading. If the oplicant placed a response below the subheading, this was moved to its appropriate place.
In	serted colons after headings/subheadings. Headings edited included:
D(eleted extra, invalid, headings used by an applicant, specifically:
	releted: non-ASCII *garbage* at the beginning/end of files; secretary initials/filename at end of file page numbers throughout text; other invalid text, such as
In	serted mandatory headings, specifically:
	orrected an obvious erro: in the response, specifically:
E	dited identifiers where upper case is used but lower case is required, or vice versa.
С	prrected an error in the Number of Sequences field, specifically:
Δ.	*Hard Page Break* code was inserted by the applicant. All occurrences had to be deleted.
	eted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error to a Patentin bug). Sequences corrected:
Ot	her;

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

14 ROS (NAY 2001

DATE: 06/05/2001 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/830,902 TIME: 18:45:06

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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

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- 7 DOMINANT SPASTIC PARAPLEGIA
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Input Set : A:\Des.txt

5471 Ala Lys Met
5474 Leu Glu Lys Leu Gln Pro Val Leu Gln Phe Ser Lys Ser Gln Thr Asp 5475 7 Val Tyr Asn Glu Ser Thr Asn Leu Thr Cyc Asp Gly His Leu Gln Fro Lys Asp Pro Leu Thr His Ala Asp Pro Leu Thr His Ala Ala Val Pro Lys Arg Lys Asp Pro Leu Thr His Ala Ala Val Pro Arg Ser Lys
5475 195 200 205 205 5478 210 Ser Thr Asn Leu Thr Cys Arg Asn Gly His Leu Gln Ser Gly Ala Val Pro Leu Thr Cys Arg Asp Pro Leu Thr His Ala Ala Val Pro Lys Arg Lys Asp Pro Leu Thr His Ala 240 250 250 255 240 250 255 250 255 250 255 250 255 255 240 240 240 240 240 240 </td
5477 Val Tyr Asn Glu Ser Thr Asn Leu Thr Cys Arg Asn Gly His Leu Gly His Leu Gly His Leu Pro Lys Arg Lys Arg Pro Leu Thr His Ala 230 230 235 240 250 255 250 255 250 250 255 250 250 250 250 250 250
5478 210 215 220 220 240 241 223 230 230 235 235 240 245 240 240 245 240 255 240 255 240 255 240 255 240 255 240 255 240 255 240 255 250 255 250 255 250 255 255 255 255
5480 Ser Glu Ser Gly Ala Val Pro Lys Arg Lys Asp Pro Leu Thr His Ala 5481 225 Asn Ser Leu Pro Arg Ser Lys Thr Val Leu Lys Ser Gly Ser Ala 240 245 250 255 250 255 250 255 250 255 250 250 250 250 250 250 250 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270 270
5481 225 230 235 240 5483 Ser Asn Ser Leu Pro Arg Ser Lys Thr Val Leu Lys Ser Gly Ser Ala 255 256 5486 Gly Leu Ser Gly His His Arg Ala Pro Ser Cys Ser Cys Ser Gly Leu Ser Met 250 270 5489 Val Ser Gly Ala Arg Pro Gly Pro Gly Pro Ala Ala Thr Thr His Lys 270 270 5499 275 280 285 285 5492 Gly Thr Pro Lys Pro Asn Arg Thr Asn Lys Pro Ser Thr Pro Thr Thr 280 285 5493 290 295 300 285 5494 Ala Val Arg Lys Lys Pro Asn Arg Thr Asn Lys Pro Ser Thr Pro Thr Thr 5493 290 300 5495 Ala Val Arg Lys Lys Lys Asn Asn Glu Ile Met Asn Glu Ile Lys Asn Ber Asn Arg Ala Arg Ala Arg Ala Arg Ala Arg Ala Arg Glu Leu Ala Lys Ala Ala Arg Ala
5483 Ser Asn Ser Leu Pro Arg Ser Lys Thr Val Leu Lys Ser Ala Arg Ser Lys Thr Val Leu Lys Ser Ala Arg Pro Ser Lys Ser Gly Leu Ser Met 255 486 Gly Leu Ser Gly He 270 280 270 285 285 Met 270 280 285 285 Met 290 285
5484 245 250 255 255 255 255 255 255 255 255 255 255 255 255 255 270 256 270
5486 Gly Leu Ser Gly His His Arg Ala Pro Ser Cys Ser Gly Leu Ser Met 5487 260 265 270 5489 Val Ser Gly Ala Arg Pro Gly Pro Gly Pro Ala Ala Ala Thr Thr His Lys 270 5490 275 280 285 5492 Gly Thr Pro Lys Pro Lys Pro Lys Pro Asn Arg Arg Thr Asn Lys Pro Ser Thr Pro Thr Thr 5493 290 295 300 5494 Ala Val Arg Lys Lys Lys Asp Leu Lys Asn Phe Asp Asn Gly Thr Ala San Leu Ile Met Asn Glu Ile Val Asp Asn Gly Thr Ala 325 310 5496 305 325 330 5501 Val Lys Phe Asp Asp Asp Ile Ala Gly Gln Glu Leu Ala Lys Gln Ala Leu Ala Lys Gly Glo Gly Gln Glu Leu Phe Gly Pro Pro Gly Asn 365 5507 Leu Arg Ala Pro Ala Arg Gly Leu Leu Leu Leu Leu Phe Gly Pro Pro Pro Gly Asn 380 5510 Gly Lys Thr Met Leu Ala Lys Ala Cys Ala Val Ala Ala Glu Ser Asn Ala Thr 5511 385 390 375 5513 Phe Phe Asn Ile Ser Ala Ala Cys Ala Leu Phe Ala Val Ala Arg Glu Leu Glu Ala 425 5513 Phe Phe Asn Ile Ser Ala Ala Ser Leu Phe Ala Val Ala Arg Glu Leu Glu Ala 420
5487 260 265 270 5489 Val Ser Gly Ala Arg Pro Gly Pro Ala Ala Ala Thr Thr His Lys Lys 280 285 285 285 285 285 285 285 285 285 285 286 285 285 286 285 285 285 285 285 286 285 285 286 285 285 286 285 286 285 286 285 286 287 286 287 286 287 286 287 286 287 287 287 287 287 287 287 287 287 287 288 288 287 320 380 320 320 320 320 330 330 330 335 330 335 335 335 335 350 350 350 350 350 350
5489 Val Ser Gly Ala Arg Pro Gly Pro Gly Pro Ala Ala Thr Thr His Lys Lys 5490 275 280 285 285 285 285 285 285 285 285 285 285 285 280 285 285 285 280 285 285 285 280 285 330 285 335 335 335 335 335 365 355 365 365 365 365 </td
5490 275 280 285 Thr Fro Lys Pro Asn Arg Thr Asn Lys Pro Ser Thr Pro Thr Asp Ser Leu Lys Asp Ser Leu Lys Asp Asp Ser Leu Lys Asp Asp Asp Asp Ile Ala Asp Ile Asp Ile Ala Ile Ala Ile Ile
5492 Gly Thr Pro Lys Pro Asn Arg Thr Asn Lys Pro Ser Thr Pro Thr Asp Ser 340 Ser 330 Ser 330 Ser 335 Ser 330 Ser 350 Ser 350 Ser 340 Ser Leu Pro Glu Leu Pro Reu Reu
5493 290 295 300 5495 Ala Val Arg Lys Lys Lys Lys Asp Leu Lys Asn Phe Arg Asn Val Asp Ser 5496 305 8 - 8 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 -
5495 Ala Val Arg Lys Lys Asp Leu Lys Asn Phe Arg Asn Val Asp Ser 5496 305 310 315 320 320 3498 Asn Leu Ala Asn Leu Ile Met Asn Glu Ile Val Asp Asn Gly Thr Ala Asp 330 335 350 350 350 350 350 350 350 350 350 350 350 350 350 </td
5496 305 310 315 320 5498 Asn Leu Ala Asn Leu Ile Met Asn Glu Ile Val Asp Asp Thr Ala 5501 Val Lys Phe Asp Asp Ile Ala Gly Gln Glu Leu Ala Lys Gln Ala Leu Ala Leu Ala Leu Ala Ala <t< td=""></t<>
5498 Asn Leu Ala Asn Leu Ile Met Asn Glu Ile Val Asp Asn Gly Thr Ala 5499 325 325 330 330 335 350 365 350 350 365 350 365 350 350 365 350 365 350 365 365 350 365 365 365 365
5499 325 330 335 5501 Val Lys Phe Asp Asp Ile Ala Gly Gln Glu Leu Ala Lys Gln Ala Leu 5502 340 345 350 5504 Gln Glu Ile Val Ile Leu Pro Ser Leu Arg Pro Glu Leu Phe Thr Gly 350 355 360 365 5507 Leu Arg Ala Pro Ala Arg Gly Leu Leu Leu Leu Phe Gly Pro Pro Gly Asn 370 375 380 380 5510 Gly Lys Thr Met Leu Ala Lys Ala Lys Ala Val Ala Ala Glu Ser Asn Ala Thr 390 395 400 5511 385 390 395 400 5513 Phe Phe Asn Ile Ser Ala Ala Ala Ser Leu Thr Ser Lys Tyr Val Gly Glu 415 405 410 415 5516 Gly Glu Lys Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu Leu Gln 425 430 430 5519 Pro Ser Ile Ile Phe Ile Asp Glu Val Asp Ser Leu Leu Cys Glu Arg 440 445 5522 Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu Phe Leu 5523 450 455 460 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 460
5501 Val Lys Phe Asp Asp Ile Ala Gly Gln Glu Leu Ala Leu Ala Leu Ala Leu Ala Leu Ala Leu Ala Ala Leu Ala
5502 340 345 350 5504 Gln Glu Ile Val Ile Leu Pro Ser Leu Arg Pro Glu Leu Phe Thr Gly Gly Ser Leu Arg Pro Gly Asn 365 360 365 360 365 360 365 360 365 360 365 400 360 365 400 360 365 400 360 365 400 410 410 <td< td=""></td<>
5504 Gln Glu Ile Val Ile Leu Pro Ser Leu Arg Pro Glu Leu Phe Thr Gly Ser Leu Arg Pro Glu Leu Pro Pro Pro Gly Asn 365 360 365 360 365 360
5505 355 360 365 5507 Leu Arg Ala Pro Ala Arg Gly Leu Leu Leu Phe Gly Pro Pro Gly Asn 5508 370 375 380 5510 Gly Lys Thr Met Leu Ala Lys Ala Val Ala Ala Glu Ser Asn Ala Thr 5511 385 390 395 400 5513 Phe Phe Asn Ile Ser Ala Ala Ser Leu Thr Ser Lys Tyr Val Gly Glu 405 410 415 5516 Gly Glu Lys Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu Leu Gln 430 430 5519 Pro Ser Ile Ile Phe Ile Asp Glu Val Asp Ser Leu Leu Cys Glu Arg 440 445 5522 Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu Phe Leu 460 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465 470
5507 Leu Arg Ala Pro Ala Arg Gly Leu Leu Leu Phe Gly Pro Pro Gly Asn 5508 370 375 380 5510 Gly Lys Thr Met Leu Ala Lys Ala Val Ala Ala Glu Ser Asn Ala Thr 390 395 400 5513 Phe Phe Asn Ile Ser Ala Ala Ser Leu Thr Ser Lys Tyr Val Gly Glu 410 415 5516 Gly Glu Lys Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu Leu Gln 420 425 430 5519 Pro Ser Ile Ile Phe Ile Asp Glu Val Asp Ser Leu Leu Cys Glu Arg 440 445 5522 Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu Phe Leu 460 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465 470 475 480
5508 370 375 380 5510 Gly Lys Thr Met Leu Ala Lys Ala Val Ala Ala Glu Ser Asn Ala Thr 5511 385 390 395 400 5513 Phe Phe Asn Ile Ser Ala Ala Ser Leu Thr Ser Lys Tyr Val Gly Glu 410 415 5514 405 405 410 410 415 5516 Gly Glu Lys Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu Leu Gln 430 5517 420 425 430 5519 Pro Ser Ile Ile Phe Ile Asp Glu Val Asp Ser Leu Leu Cys Glu Arg 5520 435 440 445 5522 Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu Phe Leu 5523 450 455 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465
5510 Gly Lys Thr Met Leu Ala Lys Ala Val Ala Ala Glu Ser Asn Ala Thr 5511 385 390 395 400 5513 Phe Phe Asn Ile Ser Ala Ala Ser Leu Thr Ser Lys Tyr Val Gly Glu 405 410 415 5516 Gly Glu Lys Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu Leu Gln 420 425 430 5519 Pro Ser Ile Ile Phe Ile Asp Glu Val Asp Ser Leu Leu Cys Glu Arg 445 5520 435 440 445 5522 Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu Phe Leu 455 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465 470 475
5511 385 390 395 400 5513 Phe Phe Asn Ile Ser Ala Ala Ser Leu Thr Ser Lys Tyr Val Gly Glu Glu Glu Gly Glu Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu Leu Glu Leu Glu Glu Arg Glu Arg Ala Ser Ala Arg Ala Ser Leu Leu Leu Cys Glu Arg Arg Ala Ser Arg Ala Arg Ala Ser Arg Leu Lys Thr Glu Arg Ala Arg Ala Arg Ala Ser Arg Leu Lys Thr Glu Phe Leu Leu Lys Thr Glu Phe Leu Arg Ala Arg <td< td=""></td<>
5513 Phe Phe Asn Ile Ser Ala Ala Ser Leu Thr Ser Lys Tyr Val Gly Glu 5514
5514
5516 Gly Glu Lys Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu Leu Gln 5517
5517
5519 Pro Ser Ile Ile Phe Ile Asp Glu Val Asp Ser Leu Leu Cys Glu Arg 5520
5520 435 440 445 5522 Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu Phe Leu 5523 450 455 460 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465 470 475 480
5520 435 440 445 5522 Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu Phe Leu 5523 450 455 460 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465 470 475 480
5523 450 455 460 5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465 470 475 480
5525 Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val Leu Val 5526 465 470 475 480
5526 465 470 475 480
3320 403
5528 Met Cly Ala Thr Asn Arg Pro Gln Glu Leu Asn Glu Ala Val Leu Arg
2250 Mer Gil Via III van vid IIO om om ned 1100 om 120 om 120
5529 485 490 495
5531 Arg Phe Ile Lys Arg Val Tyr Val Ser Leu Pro Asn Glu Glu Thr Arg
5532 500 505 510
5534 Leu Leu Leu Lys Asn Leu Leu Cys Lys Gln Gly Ser Pro Leu Thr
5535 515 520 525
5537 Gln Lys Glu Leu Ala Gln Leu Ala Arg Met Thr Asp Gly Tyr Ser Gly
5538 530 535 540
5540 Ser Asp Leu Thr Ala Leu Ala Lys Asp Ala Ala Leu Gly Pro Ile Arg
5541 545 550 555 560
5543 Glu Leu Lys Pro Glu Gln Val Lys Asn Met Ser Ala Ser Glu Met Arg

Input Set : A:\Des.txt

```
565
                                                                    575
     5546 Asn Ile Arg Leu Ser Asp Phe Thr Glu Ser Leu Lys Lys Ile Lys Arg
     5547
                       580
                                           585
     5549 Ser Val Ser Pro Gln Thr Leu Glu Ala Tyr Ile Arg Trp Asn Lys Asp
     5550
                  595
     5552 Phe Gly Asp Thr Thr Val
     5553
            ... 610
     5558 (
          PAGE
E--> 5560 \
           93
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/830,902

DATE: 06/05/2001

TIME: 18:42:33

Input Set : A:\Des.txt

Output Set: C:\CRF3\06052001\1830902.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:5560 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:107